New Paltz Central School District
Mathematics
Fourth Grade

TIME	CONTENT	SKILLS	ASSESSMENTS
September - October	**UNIT 1: The Number System** • What are landmark numbers? • How do people use landmark numbers to solve everyday problems? • How do people use estimation to solve problems? --- • Whole numbers • Place value • Addition • Subtraction • Counting • Rounding • Estimating • Addition and subtraction of multiples	• Find and count by factors of 100 • Use landmarks to find differences between numbers • Add numbers up to 10,000 • Subtract numbers up to 10,000 • Subtract with zeros-numbers up to 10,000 • Estimate • Solve story problems using addition and subtraction of numbers up to 10,000 • Understand the place value structure up to ten-thousands • Predict if a sum or difference of two numbers is odd or even • Make change, using combined coins and dollar amounts	• The Number System unit assessment • Teacher observation • Student discussion • Teacher determined checkpoints
October - November	**UNIT 2: Geometry** • What are the properties of polygons? • What is the difference between a two-dimensional object and a three-dimensional object? • How do we find the perimeter of a polygon? • How do we find the area of a rectangle? --- • 2-D geometry-polygons • 3-D geometry • Perimeter • Area	• Identify and describe spatial relationships • Develop visualization skills • Describe geometric figures – triangle, quadrilateral, pentagon, hexagon, octagon • Define and identify vertices, faces, and edges of three-dimensional shapes • Find perimeter of polygons • Find area of a rectangle	• Geometry unit assessment • Teacher observation • Student discussion • Teacher determined checkpoints

New Paltz Central School District
Mathematics
Fourth Grade

TIME	CONTENT	SKILLS	ASSESSMENTS
November - December	**<u>UNIT 3: Multiplication and Division</u>** • What patterns are used in multiplication? • What is the relationship between multiplication and division? • What do we do with remainders? --- • Multiplication • Division • Clusters • Interpretation of multiplication and division standard algorithms	• Skip count • Identify multiplication patterns • Interpret standard notation • Use known multiplication relationships to solve harder problems • Use arrays as models • Portion numbers to multiply • Multiply two-digit by one-digit numbers • Divide two-digit by one-digit numbers • Use multiplication and division as inverse operations to solve problems • Divide with remainders • Solve story problems using multiplication and division	• Multiplication and Division unit assessment • Teacher observation • Student discussion • Teacher determined checkpoints
January	**<u>UNIT 4: Algebra</u>** • How can we make an open sentence true? --- • Evaluating open sentences • Finding the missing variable to make an open sentence true • Analyzing patterns and identifying rules	• Use < and > • Complete an input/output table • Use the appropriate operation to find a missing variable	• Algebra unit assessment • Teacher observation • Student discussion • Teacher determined check points

New Paltz Central School District
Mathematics
Fourth Grade

TIME	CONTENT	SKILLS	ASSESSMENTS
February	**UNIT 5: Measurement: Statistics/Graphing** • Why and how do we measure length, capacity, mass, and time? • How do people analyze data from graphs and tables? --- • Measuring mass • Measuring length • Measuring capacity • Measuring elapsed time • Analyzing data	• Select appropriate tools • Use a ruler to measure to the nearest ¼ inch • Know and understand equivalent standard units of length • Measure mass using grams • Measure capacity using liters • Calculate elapsed time using a clock/calendar • Analyze bar and line graphs	• Measurement unit assessment • Teacher Observation • Student discussion • Teacher determined checkpoints
March - April	**UNIT 6: Fractions and Decimals** • What patterns can be found in equivalent fractions? • In what ways can we compare fractions? • How do we use fractions and decimals in our daily lives? • How does money relate to decimals, fractions, and percents? --- • Fractions • Decimals • Fraction/decimal equivalents • Money	• Compare fractions • Understand that equal fractions of a whole have the same area • Create fractional parts by dividing an area equally • Recognize that a fraction represents different sizes if the whole is different • Understand halves, fourths, thirds, fifths, sixths, tenths • Order fractions and decimals • Compare fractions and decimals • Add and subtract fractions • Understand the relationship of decimal parts to the whole • Develop strategies for combining decimals, particularly money amounts	• Fractions and Decimals unit assessment • Teacher observation • Student discussion • Teacher determined checkpoints

New Paltz Central School District
Mathematics
Fourth Grade

TIME	CONTENT	SKILLS	ASSESSMENTS
April	**UNIT 7: Geometric Relationships** • How are perpendicular lines, parallel lines, and angles used in our lives? --- • 2-D geometry	• Identify and classify properties of geometric figures – line segments and angles • Draw line segments and angles	• Geometric Relationships unit assessment • Teacher observation • Student discussion • Teacher determined checkpoints
May	**UNIT 8: Statistics** • How do people collect and analyze data in their everyday lives? • How do we describe and compare patterns and special features of data? --- • Data collection • Data representation • Data analysis	• Create line plots • Summarize a set of data • Describe the shape of data • Compare two sets of data • Record data • Organize data • Ask statistical questions • Find the mean, median, and mode in a set of data • Represent data	• Statistics unit assessment • Teacher observation • Student discussion • Teacher determined checkpoints
June	**UNIT 9: Advanced Multiplication and Division** • What strategies can be used to solve double-digit multiplication problems (23 x 25)? • How are multiplication and division related to each other? --- • Multiplication • Division	• Become fluent with multiples of larger numbers • Use a variety of strategies to multiply two-digit numbers by two-digit numbers • Identify factors of larger numbers • Partition large numbers to multiply • Use a variety of strategies to divide two-digit dividends by one-digit divisors • Use estimation • Find number patterns and sequences	• Advanced Multiplication and Division unit assessment • Teacher Observation • Student discussion • Teacher determined checkpoints